

## GROUP DATA SHEET

### Activity 1: Paper Airplanes and the Methods of Science

Your Name: \_\_\_\_\_ Today's Date: \_\_\_\_\_ Grade: \_\_\_\_\_  
 School's Name: \_\_\_\_\_ Teacher's Name: \_\_\_\_\_

#### 1. WHAT PLANE DESIGN DOES YOUR GROUP HAVE?

*Circle One (Shaded areas indicate airplane designs made with heavier paper.)*

|              |            |           |             |               |                 |
|--------------|------------|-----------|-------------|---------------|-----------------|
| Sparrow Hawk | Bald Eagle | Dragonfly | Grasshopper | Big Brown Bat | Flying Squirrel |
|--------------|------------|-----------|-------------|---------------|-----------------|

#### 2. MAKE YOUR AIRPLANE!!!

Don't lose this Group Data Sheet – Just set it aside until your plane is complete.

#### 3. JOB ASSIGNMENTS FOR GROUP EXPERIMENT

| Plane Number | Group Members<br>(Student's First Name) | Job Assignment<br>Throw 1              | Job Assignment<br>Throw 2              |
|--------------|---|--|--|
| 1            |   | Thrower      Measurer<br>Data Recorder | Thrower      Measurer<br>Data Recorder |
| 2            |   | Thrower      Measurer<br>Data Recorder | Thrower      Measurer<br>Data Recorder |
| 3            |   | Thrower      Measurer<br>Data Recorder | Thrower      Measurer<br>Data Recorder |
| 4            |   | Thrower      Measurer<br>Data Recorder | Thrower      Measurer<br>Data Recorder |
| 5            |   | Thrower      Measurer<br>Data Recorder | Thrower      Measurer<br>Data Recorder |

*Write your NAME and PLANE NUMBER on your airplane.*

#### 4. MAKE A PREDICTION

Which plane design do you think will fly the farthest? \_\_\_\_\_

#### 5. CONDUCT THE EXPERIMENT

*Throw your planes and collect your data in the table below.*

| Plane Number | <u>Throw 1</u> : Distance in Centimeters | <u>Throw 2</u> : Distance in Centimeters |
|--------------|--|--|
| 1            |  |  |
| 2            |  |  |
| 3            |  |  |
| 4            |  |  |
| 5            |  |  |

The entire class will now share their data and interpret the results of the experiment.

# My Observations from Activity 1

## Paper Airplanes and the Methods of Science

Your Name: \_\_\_\_\_

1) Name the plane design you tested: \_\_\_\_\_

What animal group was represented by your plane model? (*circle one*)

Insect

Bird

Mammal

2) Name the **control plane design** used in your class: \_\_\_\_\_

3) What unit of measurement did you use to measure length? \_\_\_\_\_

4) How far did your plane design fly? \_\_\_\_\_

How far did the control design fly? \_\_\_\_\_

Did you fly the control design? \_\_\_\_\_

5) Compare the distance flown *by your plane design* with the distance flown *by the control plane design*.

Which of the two plane designs flew the farthest? \_\_\_\_\_

6) Name an **independent** variable tested in this experiment. (**Hint:** think about the variables that YOU or YOUR CLASSMATES manipulated in this activity.)

\_\_\_\_\_

7) Name two additional **independent** variables that you could change on your plane design that might make it fly farther.

(a) \_\_\_\_\_ (b) \_\_\_\_\_

8) Name the **dependent** variable that you measured in this experiment.

\_\_\_\_\_

9) Name two additional **dependent** variables that would be interesting to measure when flying paper planes.

(a) \_\_\_\_\_ (b) \_\_\_\_\_